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A CONTRIBUTION TO THE FLORA OF THE LAKE
SUPERIOR REGION.

BY L. S. CHENEY.

During the summer of 1891, through the kindness of Mr. F. F. Wood, I had the pleasure of doing some collecting at various points in northern Wisconsin, along the north shore of Lake Superior, and along the boundary between Minnesota and Ontario,—the last a region comparatively little known, botanically. It is with the permission of Mr. Wood that I make use of the material obtained at that time, in this brief paper.

Excluding the small portion in Wisconsin, the region under consideration is a heavily timbered one, made up in greater part of a series of parallel ridges running east and west, and separated by deep narrow lakes, or tamarack or cedar swamps. Geologically, the rocks of the region belong to the Algonkian age. Along the course of the Pigeon river and boundary to Gunflint Lake, the Huronian appears. Between Gunflint Lake and Lake Seiganagah the Archæan breaks through, giving the name Granite River to the short stream connecting the two bodies of water.

From Lake Seiganagah west to Tower, the Huronian is again the surface formation. To the southwest of Gunflint Lake, the Archæan again appears as a long narrow ridge running away a hundred or more miles to the southwest. This ridge is known as the Mesabe range. Adjoining this range on the south is another narrow strip of Huronian. Over the remainder of the region, the Keweenaw forms the surface formation.

Collecting was done at Fond du Lac, on the St. Louis river; along the lake shore from Grand Marais to Grand Portage; along the old Dawson Canoe route (a line almost identical with the

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↑ 39749

boundary between Minnesota and Ontario) from Grand Portage to Basswood Lake; from this lake, along the canoe route commonly travelled, to Ely and Tower; and in the vicinity of Barron, Wisconsin. The work was begun June 16th, at Fond du Lac. We were detained ten days at Grand Marais, awaiting the construction of a canoe. At Rove Lake we were obliged to wait four days for provisions. With these two exceptions, we never stopped longer than thirty-six hours at a place. We generally travelled ten to twelve miles each day, collecting on the way. We reached Tower August 3d, and went from there to Barron, where collecting was done a few days longer.

The list of plants appended include four new to the region covered by Gray's Manual (last edition). Of these *Ribes Hudsonianum* has not, I think, been previously reported from farther east than Montana; *Carex obesa* var. *minor*¹ has not been found before south of the Saskatchewan. *Ranunculus Lapponicus*² is new to the United States. *Deplophyllum Dicksoni* is the fourth. The distribution of an introduced plant, *Ranunculus acris*, seems worthy of special mention. It was observed at all old fishing stations along Lake Superior. At Grand Portage it literally covered the land occupied by the village, and also the adjoining fields,—perhaps fifteen acres in all. From this village the plant has been carried westward along the canoe route to the portage between North Lake and South Lake, a distance of sixty miles. It was observed at most of the portages between the two points, usually at the landings. This distribution was evidently effected either by travellers carrying the flowers or seed, intentionally or otherwise, or by the seed adhering to the hair of dogs or other animals. A similar distribution from the village may be looked for along other trails, or canoe routes.

No attempt was made to collect specimens of the larger shrubs or trees; or in most cases, other plants known or supposed to be widely distributed. Such of these, however, as were identified have been inserted in the list. I desire to ac-

¹ See "Notes on Carex." L. H. Bailey, Bot. Gaz., Vol. XVII, No. 5.

² See "New and Noteworthy North American Plants." John M. Coulter and Elmon M. Fisher. Bot. Gaz., Vol. XVII, No. 8.

knowledge my obligations to Dr. L. M. Underwood, of De Pauw University; Dr. J. M. Coulter, of Lake Forest University; Dr. L. H. Bailey, of Cornell University; Dr. C. R. Barnes, of the University of Wisconsin; and Mr. R. H. True, formerly of the University of Wisconsin, for aid kindly rendered.

1. *Anemone nemorosa*, L.
Grand Marais.
2. *Coptis trifolia*, Salisb.
Grand Marais.
3. *Ranunculus acris*, L.
At all old fishing stations along the north shore of Lake Superior and on most of the portages along the boundary between Canada and Minnesota west to North Lake.
4. *Ranunculus aqualitis*, L., var. *trichophyllus*, Gray.
Granite River.
5. *Ranunculus Flammula*, L., var. *reptans*, E. Mayer.
Partridge Falls.
6. *Ranunculus hispidus*, Hook.
Devil's Track River.
7. *Ranunculus Lapponicus*, L.
On the Duluth and Port Arthur trail, three miles west of Mawshequawcawmaw River.
8. *Ranunculus Pennsylvanicus*, L. f.
Granite River, one and a half miles below Gunflint Lake.
9. *Nuphar advena*, Ait. f.
Rove Lake.
10. *Nuphar Kalmianum*, Ait.
Daniels Lake and Basswood Lake.
11. *Nymphaea odorata*, Ait.
Gunflint Lake.
12. *Nymphaea odorata*, Ait., var. *minor*, Sims.
Small lake on portage between Moose Lake and Mountain Lake.
13. *Corydalis aurea*, Willd.
Grand Marais.

14. *Corydalis glauca*, Pursh.
Grand Marais and Devil's Track River.
15. *Arabis lyrata*, L.
Grand Portage.
16. *Barbarea vulgaris*, R. Br.
Grand Marais.
17. *Cardamine hirsuta*, L.
Grand Marais.
18. *Sisymbrium canescens*, Nutt.
Grand Marais.
19. *Viola rotundifolia*, Michx.
Fond du Lac.
20. *Elodes campanulata*, Pursh.
Portage between Mud Lake and Rat Lake.
21. *Tilia Americana*, L.
Fond du Lac.
22. *Oxalis Acetosella*, L.
Grand Marais.
23. *Acer saccharinum*, Wang.
Fond du Lac and Basswood Lake.
24. *Acer spicatum*, Lam.
Portage at east end of Sucker Lake.
25. *Rhus glabra*, L.
Northern outlet of Lake Seiganagah.
26. *Lathyrus maritimus*, Bigelow.
North shore of Lake Superior, at Scott's Creek.
27. *Lathyrus venosus*, Muhl.
On portage from Pigeon River to South Fowl Lake.
28. *Geum rivale*, L.
Portage between North Fowl Lake and Moose Lake.
29. *Potentilla fruticosa*, L.
Grand Marais, and on many rocky points along
the north shore of Lake Superior.
30. *Potentilla tridentata*, Ait.
Usually found with the preceding.
31. *Prunus pumila*, L.
Island at east end of Lake Seiganagah.
32. *Prunus serotina*, Ehrh.
Fond du Lac and Grand Marais.

33. *Prunus Virginiana*, L.
Grand Marais.
34. *Rubus Nutkanus*, Mocino.
Fond du Lac, Grand Marais, and portage at east
end of Sucker Lake.
35. *Rubus occidentalis*, L.
Fond du Lac.
36. *Rubus strigosus*, Michx.
Common on all clearings and burnt districts.
37. *Rubus villosus*, Ait.
Fond du Lac.
38. *Saxifraga Aizoon*, Jacq.
South Fowl Lake.
39. *Mitella nuda*, L.
Fond du Lac and Grand Marais.
40. *Heuchera hispida*, Pursh.
Grand Marais.
41. *Ribes Cynosbati*, L.
Grand Marais.
42. *Ribes lacustre*, Poir.
Grand Marais.
43. *Ribes prostratum*, L'Her.
Grand Marais.
44. *Ribes Hudsonianum*, Richards.
Grand Marais.
45. *Ribes rubrum*, L., var. *subglandulosum*, Maxim.
Grand Marais.
46. *Drosera rotundifolia*, L.
Barron, Mountain Lake and Burntside Lake.
47. *Drosera intermedia*, Hayne, var. *Americana*, DC.
Barron.
48. *Hippuris vulgaris*, L.
Grand Marais.
49. *Epilobium angustifolium*, L.
Abundant everywhere on burnt lands.
50. *Oenothera biennis*, L.
West of Brule River.
51. *Oenothera pumila*, L.
Granite River and Oshkosh Lake.

52. *Circæa alpina*, L.
Partridge Falls, Pigeon River.
53. *Aralia hispida*, Vent.
Red Rock, north shore of Lake Superior, and west-
end of portage between Rove Lake and Mud Lake.
54. *Cornus Canadensis*, L.
Fond du Lac, Grand Marais, Grand Portage, and
Granite River.
55. *Sambucus racemosa*, L.
Fond du Lac and Grand Marais.
56. *Viburnum pauciflorum*, Pylaie.
Grand Marais and near Brule River.
57. *Linnæa borealis*, Gronov.
Common and abundant.
58. *Lonicera hirsuta*, Eaton.
On the portage between Grand Portage and Pigeon
River.
59. *Aster macrophyllus*, L.
Fond du Lac, Grand Marais, Grand Portage, Gran-
ite River and Basswood Lake.
60. *Erigeron Philadelphicus*, L.
Portage between Pigeon River and South Fowl
Lake.
61. *Antennaria plantaginifolia*, Hook.
Grand Marais.
62. *Anaphalis margaritacea*, Benth. & Hook.
Eastern extremity of Hunter's Island and Grand
Marais.
63. *Lobelia Dortmanna*, L.
Rove Lake.
64. *Vaccinium Canadense*, Kalm.
Grand Marais, Granite River, and Gunflint Lake.
65. *Vaccinium uliginosum*, L.
On rocks north shore of Lake Superior ten miles
west of Grand Portage.
66. *Vaccinium Vitis-Idæa*, L.
Grand Marais.
67. *Vaccinium Oxycoccus*, L.
Grand Marais.

68. *Arctostaphylos Uva-ursi*, Spreng.
Grand Marais. Along the lake shore at Red Rock.
69. *Andr meda polifolia*, L.
Grand Marais.
70. *Kalmia glauca*, Ait.
Grand Marais.
71. *Chimaphila umbellata*, Nutt.
Granite River, and on an island at the east end of
Lake Seiganagah.
72. *Moneses grandiflora*, Salisb.
Fond du Lac, Grand Marais, and Rove Lake.
73. *Pyrola minor*, L.
South Fowl Lake.
74. *Pyrola secunda*, L.
Rove Lake.
75. *Pyrola chlorantha*, Swartz.
Pigeon River near Partridge Falls.
76. *Pyrola elliptica*, Nutt.
Portage between Mud Lake and Rat Lake.
77. *Pyrola rotundifolia*, L., var. *incarnata*, DC.
Partridge Falls on Pigeon River.
78. *Primula Mistassinica*, Michx.
Grand Marais.
79. *Trientalis Americana*, Pursh.
Grand Marais.
80. *Steironema ciliatum*, Raf.
Island at the east end of Lake Seiganagah.
81. *Lysimachia stricta*, Ait.
Mud Lake, Cook County.
82. *Halenia deflexa*, Grisebach.
Grand Marais.
83. *Phacelia Franklinii*, Gray.
Thompsonite Bay, six miles west of Grand Marais.
84. *Mertensia paniculata*, Don.
Fond du Lac.
85. *Physalis grandiflora*, Hook.
Ely.
86. *Mimulus ringens*, L.
Portage between North Lake and Gunfint Lake.

87. *Castilleia pallida*, Kunth., var. *septentrionalis*, Gray.
North shore of Lake Superior, five miles west of
Grand Portage.
88. *Euphrasia officinalis*, L., var. *Tatarica*, Benth.
Grand Marais.
89. *Melampyrum Americanum*, Michx.
North shore of Lake Superior, five miles west of
Grand Portage.
90. *Utricularia vulgaris*, L.
Granite River.
91. *Pinguicula vulgaris*, L.
At Grand Marais and other places on rocks along the
lake shore east to Grand Portage.
92. *Lycopus sinuatus*, Ell.
93. *Calamintha Clinopodium*, Benth.
Portage between Lake Seiganagah and Oshkosh
Lake.
94. *Lophanthus anisatus*, Benth.
Portage between Burntside Lake and Mud Lake.
95. *Scutellaria lateriflora*, L.
On an Island at the west end of Lake Seiganagah.
96. *Scutellaria galericulata*, L.
With *S. lateriflora*.
97. *Brunella vulgaris*, L.
Grand Portage and Tower.
98. *Plantago major*, L.
At the mouth of Devil's Track River.
99. *Polygonum tenue*, Michx.
At Grand Marais and Devil's Track River.
100. *Polygonum amphibium*, L.
Granite River and Basswood Lake.
101. *Polygonum viviparum*, L.
Grand Marais.
102. *Asarum Canadense*, L.
Fond du Lac and Grand Marais.
103. *Ulmus Americana*, L.
Fond du Lac, Grand Marais, and occasional along
the boundary between Minnesota and Ontario.

104. *Myrica asplenifolia*, Endl.
Large island in the west end of Lake Seiganagah
105. *Betula lenta*, L.
Common throughout the region.
106. *Betula papyrifera*, Marshall.
Common and more abundant than *B. lenta*.
107. *Betula pumila*, L.
Borders of lakes along the boundary between Minnesota and Ontario.
108. *Betula glandulosa*, Michx.
Rat Lake.
109. *Alnus viridis*, DC.
Grand Marais, Scott's Creek and Brule River.
110. *Alnus incana*, Willd.
Grand Marais.
111. *Corylus Americana*, Walt.
Fond du Lac. Grand Portage.
112. *Corylus rostrata*, Ait.
Fond du Lac, Grand Marais, Grand Portage, and everywhere along the route to Tower.
113. *Quercus macrocarpa*, Michx.
On portage between Lake Seiganagah and Oshkosh Lake.
114. *Populus tremuloides*, Michx.
Common.
115. *Populus grandidentata*, Michx.
Common.
116. *Populus balsamifera*, L.
Mountain Lake and Moose Lake.
117. *Pinus Strobus*, L.
This species, with *P. resinosa*, common throughout the region.
118. *Pinus Banksiana*, Lambert.
Brule River, Red Rock, and along the boundary between Minnesota and Ontario west to Basswood Lake.
119. *Pinus resinosa*, Ait.

120. *Picea nigra*, Link.
Common in the swamps.
121. *Abies balsamea*, Miller.
Observed at all points along the route.
122. *Laræx Americana*, Michx.
North Lake.
123. *Thuja occidentalis*, L.
A common tree in swamps.
124. *Juniperus Virginiana*, L.
Observed at several points along Lake Superior.
125. *Taxus Canadensis*, Willd.
Fond du Lac.
126. *Calypso borealis*, Salisb.
Grand Marais.
127. *Corallorhiza innata*, R. Brown.
Fond du Lac.
128. *Listera cordata*, R. Brown.
Rosebud Creek, Brule River, and Rove Lake.
129. *Listera convallarioides*, Nutt.
Brule River.
130. *Spiranthes Romanzoffiana*, Cham.
Portage between Long Lake and Burntside Lake, and
on a the large island at east end of Lake Seiganagah.
131. *Spiranthes gracilis*, Bigelow.
Portage between Long Lake and Fall Lake.
132. *Goodyera repens*, R. Br.
Collected at many points along the route. Common
133. *Habenaria hyperborea*, R. Br.
Portage between Rat Lake and South Lake.
134. *Habenaria obtusata*, Richardson.
Common everywhere.
135. *Habenaria Hookeri*, Torr.
Granite River and at the east end of Knife Lake.
136. *Habenaria orbiculata*, Torr.
Rove Lake.
137. *Habenaria psycodes*, Gray.
Granite River and Otter Track Lake.
138. *Cypripedium acaule*, Ait.
Granite River.

139. *Iris versicolor*, L.
Grand Marais.
140. *Sisyrinchium angustifolium*, Mill.
Grand Marais.
141. *Smilacina trifolia*, Desf.
Near Brule River.
142. *Maianthemum Canadense*, Desf.
Fond du Lac and Grand Marais.
143. *Streptopus amplexifolius*, DC.
Grand Marais.
144. *Streptopus roseus*, Michx.
Grand Marais.
145. *Clintonia borealis*, Raf.
Fond du Lac and Grand Marais.
146. *Lilium Philadelphicum*, L.
Observed at two or three points along Lake Superior between Grand Marais and Grand Portage.
147. *Tofieldia palustris*, Hudson.
Grand Marais.
148. *Luzula spadicea*, DC., var. *melanocarpa*, Meyer.
Devil's Track River.
149. *Sparganium minimum*, Fries.
South Fowl Lake and Sucker Lake.
150. *Sagittaria variabilis*, Engelm.
Fall River and Fall Lake.
151. *Sagittaria heterophylla*, Pursh.
With *S. variabilis*.
152. *Potamogeton natans*, L.
Common in all inland waters.
153. *Potamogeton Pennsylvanicus*, Cham.
Rove Lake.
154. *Potamogeton amplifolius*, Tuckerm.
Rove Lake.
155. *Potamogeton heterophyllus*, Schreb.
Rove Lake.
156. *Potamogeton pauciflorus*, Pursh.
Rove Lake.
157. *Eriocaulon septangulare*, Withering.
Lake Seiganagah and small pond east of Sucker Lake.

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158. *Scirpus fluviatilis*, Gray.
 Island at the east end of Lake Seiganagah.
159. *Carex pauciflora*, Lightf.
 Rove Lake.
160. *Carex intumescens*, Rudge.
 South Fowl Lake.
161. *Carex lupulina*, Muhl., var. *pedunculata*, Dewey.
 Pigeon River.
162. *Carex utriculata*, Boott.
 Mosquito Bay, Gunflint Lake.
163. *Carex monile*, Tuckerm.
 South Fowl Lake.
164. *Carex Tuckermanni*, Dewey.
 Ely and Barron.
165. *Carex retrorsa*, Schwein.
 Mosquito Bay, Gunflint Lake.
166. *Carex Pseudo-Cyperus*, L.
 Portage at east end of Otter Track Lake.
167. *Carex Houghtonii*, Torr.
 Grand Marais and Mosquito Bay, Gunflint Lake.
168. *Carex filiformis*, L.
 Grand Marais and Mountain Lake.
169. *Carex riparia*, W. Curtis.
 Grand Marais.
170. *Carex alpina*, Swartz.
 Grand Marais.
171. *Carex fusca*, All.
 Grand Marais.
172. *Carex stricta*, Lam.
 Grand Marais.
173. *Carex crinita*, Lam.
 Barron.
174. *Carex Magellanica*, Lam.
 Island at the east end of Lake Seiganagah.
175. *Carex limosa*, L.
 Grand Marais and Daniels Lake.
176. *Carex arctata*, Boott.
 Shore of Lake Superior near Brule River.

177. *Carex flava*, L.
Island at the east end of Lake Seiganagah.
178. *Carex flava*, L., var. *viridula*, Bailey.
Island at the east end of Lake Seiganagah.
179. *Carex livida*, Willd.
Grand Marais.
180. *Carex aurea*, Nutt.
Granite River near Pine Lake.
181. *Carex varia*, Muhl.
Grand Marais.
182. *Carex obesa*, All., var. *minor*, Boott.
South Fowl Lake.
183. *Carex polytrichoides*, Muhl.
Mawshequawcawmaw River.
184. *Carex tenella*, Schkuhr.
Rove Lake.
185. *Carex canescens*, L.
Rove Lake.
186. *Carex canescens*, L., var. *polystachya*, Boott.
Mosquito Bay, Gunflint Lake.
187. *Carex trisperma*, Dewey.
Rove Lake.
188. *Carex tribuloïdes*, Wahl., var. *Bebbi*, Bailey.
Grand Marais.
189. *Carex scoparia*, Schkuhr.
Mosquito Bay, Gunflint Lake.
190. *Carex adusta*, Boott.
Mosquito Bay, Gunflint Lake.
191. *Carex straminea*, Willd.
Grand Marais.
192. *Panicum depauperatum*, Muhl.
Mud Lake, Cook County.
193. *Panicum dichotomum*, L.
Knife Lake.
194. *Zizania aquatica*, L.
Fall Lake.
195. *Phalaris arundinacea*, L.
Gunflint Lake.

196. *Hierochloa borealis*, Roem. & Schultes.
Grand Portage.
197. *Oryzopsis Canadensis*, Torr.
Gunflint Lake.
198. *Muhlenbergia glomerata*, Trin.
Portage between Burntside Lake and Mud Lake.
199. *Brachyelytrum aristatum*, Beauv.
Rove Lake.
200. *Phleum pratense*, L.
At all old settlements. Introduced.
201. *Alopecurus geniculatus*, L.
At the east end of Basswood Lake.
202. *Agrostis scabra*, Willd.
Falls on Granite River one and a half miles below
Gunflint Lake.
203. *Calamagrostis Canadensis*, Beauv.
South Fowl Lake.
204. *Calamagrostis stricta*, Trin.
Along the shore of Lake Superior four miles west of
Grand Portage.
205. *Deschampsia cæspitosa*, Beauv.
Grand Portage.
206. *Deschampsia cæspitosa*, Beauv., var. Vasey.
Grand Marais.
207. *Trisetum subspicatum*, Beauv.
Grand Marais.
208. *Avena striata*, Michx.
Scott's Creek.
209. *Danthonia spicata*, Beauv.
Gunflint Lake.
210. *Poa nemoralis*, L.
Grand Portage.
211. *Poa nemoralis*, L., var. Vasey.
North shore of Lake Superior ten miles west of
Grand Portage.
212. *Poa serotina*, Ehrhart.
South Lake Portage.
213. *Poa pratensis*, L.
South Lake Portage.

214. *Poa pratensis*, L., var. *Vasey*.
Grand Marais.
215. *Glyceria Canadensis*, Trin.
Portage between Burntside Lake and Mud Lake.
216. *Glyceria nervata*, Trin.
Ely, Fall Lake, Gunfint Lake and Grand Marais.
217. *Glyceria grandis*, Watson.
Ely.
218. *Glyceria fluitans*, R. Br., var. *minor*, Vasey.
Portage at western extremity of Gunfint Lake and
North Lake Portage.
219. *Festuca tenella*, Willd.
South Fowl Lake.
220. *Festuca ovina*, L.
Grand Marais.
221. *Bromus ciliatus*, L.
Scott's Creek.
222. *Bromus Kalmii*, Gray.
Portage between Burntside Lake and Mud Lake.
223. *Agropyrum tenerum*, Vasey.(?)
Rove Lake.
224. *Elymus Canadensis*, L.
Grand Marais and portage at east end of Sucker
Lake.
225. *Aspidium fragrans*, Swartz.
Partidge Falls on Pigeon River, and at the falls at
the northern outlet of Lake Seiganagah.
226. *Osmunda regalis*, L.
Partridge Portage.
227. *Botrychium Lunaria*, Swartz.
At the mouth of the Brule River, on the west bank.
228. *Lycopodium annotinum*, L.
This, with the three following, were observed
throughout the region. None, however, were col-
lected.
229. *Lycopodium obscurum*, L., var. *dendroideum*, Watson.
230. *Lycopodium clavatum*, L.
231. *Lycopodium complanatum*, L.

232. *Selaginella spinosa*, Beauv.
Grand Marais.
233. *Selaginella rupestris*, Spreng.
Grand Marais, South Fowl Lake, and Rove Lake.
234. *Sphagnum cymbifolium*, Ehrh.
Burntside Lake.
235. *Sphagnum fimbriatum*, Wils.
Burntside Lake.
236. *Sphagnum acutifolium*, Ehrh.
Grand Marais.
237. *Sphagnum Girgensohnii*, Russ.
Burntside Lake.
238. *Sphagnum Wulfianum*, Girgens,
Burntside Lake.
239. *Sphagnum intermedium*, Hoffm.
Burntside Lake.
240. *Cynodontium polycarpum*, Schimp.
Grand Marais.
241. *Cynodontium polycarpum*, Schimp., var. *strumiferum*,
Schimp.
Grand Marais.
242. *Cynodontium virens*, Schimp., var. *Wahlenbergii*, Bruch. &
Schimp.
Grand Marais.
243. *Dicranum montanum*, Hedw.
Ely.
244. *Dicranum flagellare*, Hedw.
Rat Lake and Barron.
245. *Dicranum fuscescens*, Turn.
Grand Marais.
246. *Dicranum scoparium*, Hedw.
Fond du Lac.
247. *Dicranum Drummondii*, Muell.
Grand Marais.
248. *Dicranum undulatum*, Turn.
Rove Lake.
249. *Fissidens incurvus*, Schwaegr.
Grand Marais.

250. *Fissidens adiantoides*, Hedw.
Grand Marais and Basswood Lake.
251. *Fissidens adiantoides*, Hedw., var. *immarginatus*, Lindb.
Gunflint Lake.
252. *Ceratodon purpureus*, Brid.
Collected at Grand Marais. Very common.
253. *Distichium capillaceum*, Bruch. & Schimp.
Grand Marais.
254. *Distichium inclinatum*, Bruch. & Schimp.
Grand Marais.
255. *Blindia acuta*, Bruch. & Schimp.
Grand Marais.
256. *Leptotrichum glaucescens*, Hampe.
Grand Marais.
257. *Grimmia apocarpa*, Hedw.
Grand Marais.
258. *Grimmia apocarpa*, Hedw., var. *rivularis*, Nees & Hornsch.
Grand Marais.
259. *Grimmia unicolor*, Grev.
Grand Marais.
260. *Racomitrium fasciculare*, Brid.
Grand Marais.
261. *Hedwigia ciliata*, Ehrh.
Grand Marais.
262. *Amphoridium Lapponicus*, Schimp.
Brule River.
263. *Ulota Hutchinsiae*, Schimp.
Grand Marais.
264. *Orthotrichum speciosum*, Nees.
Grand Marais.
265. *Encalypta ciliata*, Hedw.
Grand Marais.
266. *Tetraphis pellucida*, Hedw.
Grand Marais.
267. *Tetraplodon mnioides*, Bruch. & Schimp.
Lake shore five miles west of Grand Marais. Near the
Mawshequawcawmaw River.
268. *Funaria hygrometrica*, Sibth.
Common. Collected near Grand Marais.

269. *Bartramia pomiformis*, Hedw.
Grand Marais, Partridge Falls on Pigeon River, and
falls at the northern outlet of Lake Seiganagah.
270. *Philonotis fontana*, Brid.
Grand Marais.
271. *Leptobryum pyriforme*, Schimp.
Burntside Lake.
272. *Webera polymorpha*, Schimp.
Lake shore three miles east of Grand Marais.
273. *Webera nutans*, Hedw.
Ely.
274. *Bryum bimum*, Schreb.
Grand Marais.
275. *Bryum roseum*, Schreb.
Fond du Lac, Grand Marais, and Barron.
276. *Mnium cuspidatum*, Hedw.
Grand Marais.
277. *Mnium affine*, Bland.
Fond du Lac.
278. *Mnium orthorhynchum*, Bruch. & Schimp.
Knife Lake.
279. *Mnium subglobosum*, Bruch. & Schimp.
Fond du Lac.
280. *Aulacomnium palustre*, Schwaegr.
Granite River.
281. *Atrichum angustatum*, Bruch. & Schimp.
Barron.
282. *Pogonatum alpinum*, Roehl.
Lake shore one mile west of Grand Marais.
283. *Pogonatum alpinum*, Roehl., var. *arcticum*, Brid.
Granite River.
284. *Polytrichum gracile*, Menz.
Burntside Lake.
285. *Polytrichum juniperinum*, Willd.
Grand Marais.
286. *Fontinalis antipyretica*, Linn., var. *gigantea*, Sulliv.
Mud Lake, Cook County.
287. *Neckera pennata*, Hedw.
Fond du Lac and Weyerhauser.

288. *Neckera oligocarpa*, Bruch. & Schimp.
Grand Marais.
289. *Leucodon sciuroides*, Schwaegr.
Falls at the northern outlet of Lake Seiganagah.
290. *Myurella julacea*, Bruch. & Schimp.
Rove Lake.
291. *Leskea obscura*, Hedw.
Falls at the northern outlet of Lake Seiganagah.
292. *Anomodon rostratus*, Schimp.
Falls at the northern outlet of Lake Seiganagah.
293. *Anomodon obtusifolius*, Bruch. & Schimp.
Fond du Lac.
294. *Pylaisia polyantha*, Bruch. & Schimp.
Rove Lake and Grand Marais.
295. *Pylaisia intricata*, Bruch. & Schimp.
Rove Lake.
296. *Pylaisia velutina*, Bruch. & Schimp.
Ely.
297. *Climacium dendroides*, Web. & Mohr.
Brule River near where it empties into Lake Superior.
298. *Hypnum gracile*, Bruch. & Schimp.
Barron.
299. *Hypnum recognitum*, Hedw.
Fond du Lac.
300. *Hypnum delicatulum*, Linn.
Barron.
301. *Hypnum latum*, Brid.
Burntside Lake and Barron.
302. *Hypnum salebrosum*, Hoffm.
Falls at the northern outlet of Lake Seiganagah.
303. *Hypnum plumosum*, Swartz.
Grand Marais.
304. *Hypnum strigosum*, Hoffm.
Grand Marais.
305. *Hypnum recurvans*, Schwaegr.
Gunflint Lake.

306. *Hypnum serrulatum*, Hedw.
Burntside Lake.
307. *Hypnum turfaceum*, Lindb.
Ely.
308. *Hypnum denticulatum*, Linn.
Granite River.
309. *Hypnum sylvaticum*, Huds., var. *orthocladium*, L. & J.
Granite River.
310. *Hypnum serpens*, Linn.
Ely.
311. *Hypnum orthocladon*, Beauv.
Falls at the northern outlet of Lake Seiganagah.
312. *Hypnum irriguum*, Hook. & Wils.
Falls at the northern outlet of Lake Seiganagah.
313. *Hypnum hispidulum*, Brid.
Barron.
314. *Hypnum chrysophyllum*, Brid.
Barron.
315. *Hypnum stellatum*, Schreb.
Burntside Lake.
316. *Hypnum aduncum*, Hedw., var.
Mawshequawcawmaw River.
317. *Hypnum uncinatum*, Hedw.
Ely.
318. *Hypnum uncinatum*, Hedw., var. *plumulosum*, Bruch. &
Schimp.
Burntside Lake.
319. *Hypnum crista-castrensis*, Linn.
Fond du Lac, Grand Marais and Brule River.
320. *Hypnum reptile*, Michx.
Burntside Lake.
321. *Hypnum imponens*, Hedw.
Gunflint Lake.
322. *Hypnum arcuatum*, Lindb.
Barron.
323. *Hypnum pratense*, Koch, Ms.
Burntside Lake.

324. *Hypnum Haldanianum*, Grev.
Barron and Fond du Lac.
325. *Hypnum palustre*, Huds.
Grand Marais.
326. *Hypnum palustre*, Huds., var. *humulosum*, L. & J.
Grand Marais.
327. *Hypnum cordifolium*, Hedw.
Barron and Burntside Lake.
328. *Hypnum Schreberi*, Willd.
Grand Marais.
329. *Hypnum splendens*, Hedw.
Fond du Lac.
330. *Hypnum triquetrum*, Linn.
Barron and Fond du Lac.
331. *Frullania Eboracensis*, Lehm.
Fond du Lac.
332. *Radula complanata*, Dumort.
Fond du Lac.
333. *Porella platyphylla*, Lindb.
Fond du Lac.
334. *Ptilidium ciliare*, Nees.
Grand Marais and Mawshequawcawmaw River.
335. *Blepharostoma trichophyllum*, Dumort.
Grand Marais.
336. *Cephalozia multiflora*, Spruce.
Grand Marais.
337. *Diplophyllum Dicksoni*, Dumort.
Grand Marais.
338. *Plagiochila asplenoides*, Dumort.
Grand Marais.
339. *Jungermannia barbata*, Schreb.
Lake Seiganagah.
340. *Scapania exsecta*, Aust.
Grand Marais.
341. *Pellia epiphylla*, Raddi.
Brule River.
342. *Pellia endiviaefolia*, Dumort.
Barron.

343. *Preissia hemisphaerica*, Cogn.

Grand Marais.

344. *Riccia fluitans*, L.

Barron.

345. *Riccia natans*, L.

Ely.

MADISON, WIS., Feb. 22, 1893.